

Source: The Rising Nepal

## **Hydropower Development Policy Of Nepal An Overview of Its Implementation : Hari Bahadur Thapa**

After the restoration of democracy in 1990, the state's efforts were focussed on participatory development with a liberal economic policy. Considering the potentiality of harnessing the vast natural water resources, hydropower sector was given priority, and a Hydropower Development Policy, 1992 was announced by the government. After nine years of its implementation, the then government approved and implemented a new policy, Hydropower Development Policy, 2001, which is still in practice. In this context, it is already late in reviewing and updating the policy in the new changing environment.

### **Limited scope**

The Hydropower Development Policy, 1992, which was formulated for the first time, was quite limited in scope. Yet it was able to involve the private sector in hydropower development in the country. With the lessons learn from this policy implementation and incorporation of the latest legal provisions like Environmental Protection Act and Rules (1997) and Local Self Governance Act (1999), the government formulated the Hydropower Policy in 2001 by incorporating all new criteria and private sector demands as well.

The provisions made in the policy emphasised generating electricity at low cost by utilising the water resources available in the country, extension of reliable and qualitative electricity service throughout the country, tie-up of electrification with economic activities, rendering support to the development of the rural economy by extending rural electrification and development of hydropower as an exportable commodity. However, research shows that the policy has been unable to achieve its objectives as targeted.

Nepal's hydropower policy notes that generation and consumption of electrical energy in Nepal is minimal. The major sources of energy are still agriculture and forest-based resources. Despite the abundant possibility of hydropower generation as a renewable energy source, it has not been harnessed to the desired extent. Industrial enterprises have not developed at the desired pace due to the lack of electricity. An opportune hydropower policy is, thus, seen as a prerequisite for the supply of energy at a reasonable price, which has the pivotal role in the development of rural electrification, supply of domestic energy, creation of employment and in the development of industrial enterprises.

Based on the experiences gained in the course of implementing the principles followed by the Hydropower Development Policy, 1992, emerging new concepts in the international market and their impacts, technological development, possibility of exporting hydropower energy, possibility of foreign investment and commitment to environmental protection, the revision and improvement of the hydropower policy has become imperative with a view to making it clear, transparent, practical and investment-friendly.

The new hydropower policy should clearly reflect the direction on vital issues such as development of multipurpose plans for maximum utilisation of available water resources, appropriate sharing of benefits, role of public and private sector, utilisation of internal as well as external market, and clarity and transparency in the activities of government with the private sector.

Study shows that there have been a few and remarkable achievements from the implementation of the hydropower policy in the form of power generation, royalty collection, private sector encouragement in hydropower development and capacity building. This has ultimately contributed to social and economic transformation of the country.

However, on the other side, there are many gaps in the policy due to which the private sector and international investors are in a wait and see position. The policy is unable to harmonise with the strategies set by the Water Resources Strategy, 2002 and targets set by the National Water Plan, 2005.

The main gap is found in policy and legal harmonisation and regular updating of the policy as per the requirement.

According to the study, the following scenario appears to be the impact of the Hydropower Development Policy:

Up to the year 2014/15, a total of 733.557 MW of hydropower has been produced, of which 255.647 MW has been generated through private sector investment. Some 83 projects with an installed capacity of 1,521.28 MW are in the construction phase. In addition to these, 33 hydropower projects of 532.542 MW installed capacity are in different stages of development. This has opened the door for national and international private sector investment, but the government should do more to convince the private sector to lure foreign investment.

Nepal's hydropower policy has strongly recommended rural electrification, meeting the domestic needs and exporting energy, but still the country is facing an acute power outage even in the summer season. The policy has clearly made provisions about royalty collection, energy quality, energy inspectors, institutional arrangement, but still no clear guidelines and implementation plans are in operation to realise them.

The policy has strongly recommended the regulatory body, Nepal Electricity Regulatory Commission (NERC), for regulating electricity, but the council is yet to be established. The bill is still pending in Parliament. Due to this reason, monitoring and regulation of the electricity sector is weak and like a ship without a captain.

The Department of Electricity Development (DoED) and Water and Energy Commission (WEC) have been established as per the policy, which can be considered a good initiation, but both the organisations are not functioning as per the mandate, due to which energy planning and private sector promotion in hydropower development are not being effective. Institutional strengthening and capacity building of these organisations are essential.

Conflicts, both violent and non-violent, social movements, financial structure, political instability and a multi-window process for approval of projects are other factors leading to the delay in identification, study/investigation and construction of projects.

To address these issues and challenges, Nepal's hydropower policy should be updated, harmonised with the prevailing laws/plan/strategy while the enactment of a new electricity act and regulatory body act is essential. The private sector is not fully encouraged and convinced by the current policy. The policy lacks clear provisions and an operational mechanism for the projects which will be handed over by the private sector developers to the government after their license period expires.

As the private sector has already achieved significant progress in hydropower development, the Nepal Electricity Authority needs to be reformed. A master plan for hydropower development of the country has become most urgent. As The Water Resources Strategy, 2002 and National Water Plan, 2005 give emphasis to basin planning and adoption of an Integrated Water Resources Management approach for the holistic development of water resources, the policy has not recognised these provisions.

As multipurpose and reservoir projects are different from conventional run of the river and daily peaking power plant in view of construction technology, coverage and financial investment, the policy has no such provision to attract private sector investment. Due to the load pattern and current situation, multi-purpose and reservoir projects development is essential for the long run.

Various government agencies are involved in the sector, however the policy does not emphasise on collaboration and coordination mechanism among them. For the fast and sustainable development of hydropower, a single window policy and effective coordination between all the agencies are necessary.

### **Social and political problems**

The policy does not foresee social and political problems, which are major issues and concerns in recent days. The private sector is a profit making sector, hence the private sector always seeks profit and investment assurance. Private hydropower developers are seeking clearer provisions and assurances

against their investment in projects like hydropower. The policy, however, fails to give such assurances to international developers/multi-national companies. If assurance is there and ambiguous legal provisions are removed, huge investment is possible in mega hydropower projects in Nepal.

Thapa is Senior Divisional Engineer,  
National Vigilance Centre.

Source: The Kathmandu Post; 20 March 2016

## **Security scheme proposed for Upper Karnali**

Investment Board Nepal (IBN) has proposed setting up an integrated security mechanism at the National Security Council to protect the property of the under-construction Upper Karnali Hydropower Project which has been repeatedly attacked by vandals. The council is chaired by the prime minister.

The board proposed setting up the mechanism during a meeting attended by representatives of the security forces of the Mid-Western and Far Western regions.

The regional administrator, chief district officer and representatives of the Nepal Army, Nepal Police and Armed Police Force were present at the meeting.

“We discussed matters related to the project and the security of its staff, in particular, during the meeting,” said Radesh Pant, chief executive officer of IBN.

“A serious discussion was conducted about the frequent attacks on the project’s property,” he said, adding that they had asked the government to set up an integrated security mechanism. He said that the National Security Council would decide the form of the mechanism.

Repeated vandalism could affect the project. On March 8, an unidentified group torched a jeep belonging to GMR Upper Karnali Hydropower Limited which is building the 900 MW project. Pant urged local stakeholders not to harbour negative thoughts about the project as it is being developed not only with the investment of GMR Energy Limited, the energy arm of the GMR Group of India, but also with funding from the World Bank and Nepali investors.

“As per the meeting’s conclusion that an integrated security mechanism would be the right option to prevent vandalism at the project, we have decided to propose setting up such a mechanism to the council,” said Ghanshyam Ojha, consultant to IBN.

He added that a resettlement plan for locals affected by the project had been completed. “We will start the land acquisition work next Friday.”

According to Ojha, European banks have promised to provide Rs100 billion to the project developers. The donors are scheduled to arrive in Nepal in April to provide the committed funds, he said.

The government and GMR signed a power development agreement (PDA) in September 2015 for the construction of the project. It is spread over three districts—Surkhet, Dailekh and Achham.

The project developer will give 27 percent of the shares to the Nepal government and the country will also receive 12 percent (108 MW) of the energy produced free of cost. Similarly, the project is expected to provide jobs to more than 2,000 people, and the government is projected to earn financial benefits of Rs300 billion.

The project will be acquiring 48.85 hectares of private land and 207.75 hectares of government-owned land. It will affect an estimated 239 households, 46 of which will have to be provided rehabilitation schemes. The construction of the project is targeted to be completed by 2021 and it is estimated to cost Rs145 billion in total.

## NEA enquires about soft loan conditions

*West seti hydropower project*

*BIBEK SUBEDI*

Nepal Electricity Authority (NEA) has asked for terms and conditions that would accompany the soft loan that China Three Gorges Corporation (CTGC) has assured to arrange for NEA for setting up a joint venture (JV) company for the development the West Seti Hydropower Project.

Senior officials from NEA and CTGC are currently holding talks on the JV agreement.

Although CTGC has assured NEA to help in getting \$400 million in soft loan from Chinese banks, it has not stated the exact time by which the soft-loan deal would be done.

Officials involved in the talks said NEA wanted to be sure that CTGC would arrange the necessary funds.

“We have raised a question that if CTGC fails to arrange the loan, how will NEA finance the JV company?” said one of the NEA officials present in the meeting. “Likewise, what would be the case, if the terms and conditions of the loan arranged by CTGC are not agreeable to NEA.”

NEA has expected to get the terms and conditions of the loan from CTGC before the JV agreement is signed. “However, we are hopeful the agreement will be signed very soon,” said Sher Sing Bhat, deputy managing director of NEA.

As per the memorandum of understanding (MoU) signed between Investment Board Nepal (IBN) and CWE Investment Corporation, a subsidiary of CTGC, in August 2012, the Chinese company will have a 75 percent stake in the JV company, while the NEA will hold the rest.

Senior officials of CTGC are in Nepal since Friday to finalise the JV agreement ahead of Prime Minister KP Oli’s visit to China that begins on Sunday.

Yao Sexiong, general manager of CTGC’s investment department, and Sylvia Li, CTGC’s business manager represented the Chinese company, while Bhat and senior NEA officials Gokarna Sharma, Jagdishwar Singh and Anil Ratna Tuladhar represented NEA in the meeting facilitated by the IBN.

Despite getting a draft of the JV agreement from CWE some nine months ago, IBN has been struggling to seal the deal due to NEA’s reservations. The state-owned power utility body cited lack of resources and a need to study the country’s power demands when the hydro plant is projected to be completed.

As NEA is the sole power buyer, it is worried about possible losses due to surplus electricity. However, NEA has shown greater interest in the project lately.

The West Seti project is estimated to cost \$1.6 billion. In April 2014, the Finance Ministry had written to the Chinese government asking for \$400 million in soft loans to allow the NEA to be an equity partner in the JV company and build a transmission line to evacuate the power generated by the plant. But no headway has been made on this front.

Source: The Kathmandu Post; 23 March 2016

## **ADB, IFC, EIB delegation to inspect hydel project**

*Upper karnali hydropower project*

**BIBEK SUBEDI**

With six months left for financial closure of the Upper Karnali Hydropower Project, a team of representatives from Asian Development Bank (ADB), International Finance Corporation (IFC) and European Investment Bank (EIB) is visiting Nepal to take stock of the 900 MW project.

The team will review the progress of the project, details of power purchase agreement, existing financial arrangement and progress towards financial closure before making a final recommendation for granting loan. "They will be in Nepal in the first week of April," said an informed source.

Government sources said that the ADB, IFC and EIB have agreed in principle to grant a loan amounting to \$1 billion for financing the project promoted by India's GMR.

"As GMR has to complete the financial closure of the project by September 2016, the visit is important for the project," the source added.

The project is targeted to be completed by 2021 at an estimated cost of Rs145 billion.

ADB Country Director for Nepal Kenichi Yokoyama confirmed that a team from ADB is coming. "ADB has shown keen interest in financing the project but nothing has been decided," he said.

According to him, the ADB has the policy of investing maximum 25 percent of the required financing for a private sector developed project.

With the financial closure approaching, there has been some progress in the project. The developer should complete the land acquisition before the financial closure. According to the Investment Board Nepal (IBN), an agreement has been reached on the resettlement action plan with locals who are being displaced by the hydro project. "Land acquisition progress is almost over," said an IBN official.

In December 2014, the IFC had signed an agreement with India's GMR Group to become an equity partner in the project. As per the agreement, the IFC will have a 10 percent stake and lead the fund raising for the financial closure.

Subsequently, the government and GMR signed a project development agreement (PDA) in September 2015 for the construction of the project. It is spread over three districts-Surkhet, Dailekh and Achham. The project developer will give 27 percent of the shares to the government and the country will also receive 12 percent (108 MW) of the total energy produced for free. Similarly, the project is expected to provide jobs for more than 2,000 people and the government is projected to earn Rs 300 billion in financial benefits. The project will be acquiring 48.85 hectares of private land and 207.75 hectares of government-owned land. It will affect an estimated 239 households.

Source: The Kathmandu Post; 25 March 2016

## **DPR for Nalsing Gadh Hydro Project delayed**

*BHIM BAHADUR SINGH*

The preparation of a detailed project report (DPR) for the Nalsing Gadh Hydropower Project located in mid-western Nepal has been affected due to a flurry of “anonymous complaints” against the consultant appointment process.

The 410 MW project in Jajarkot district had been identified as one of the potential storage-type hydropower projects by the Identification and Feasibility Study of Storage Projects conducted in 1999-2001.

The Nalsing Gadh Development Committee had set the project moving after many years, but the “water mafia” has been strongly trying to thwart their efforts, locals said. They have demanded that the DPR be completed soon as the project has been stalled for a long time.

“We have issued a notice to the shortlisted consultants for the DPR contract,” said Moti Bahadur Kunwar, executive director of the committee. He added that a number of anonymous complaints against the appointment of consultants had complicated the project’s development process.

Last July, the committee had selected SMEC International of Australia to conduct the DPR based on a financial and technical evaluation. It had initially shortlisted five among the 15 applicants.

The shortlisted firms were narrowed down to three—SMEC International of Australia, MWH of the US and AF Consultant of Switzerland—during the final review. Following the selection, the second bidder had complained that the appointment process was not transparent. However,

Kunwar said that they had selected the consultant in a fair and transparent manner. SMEC had quoted a price of Rs1.12 billion to prepare the DPR compared to the committee’s estimated cost of Rs1.25 billion. The committee had later negotiated a lower price of Rs940 million, he said.

The consultant appointment process landed in controversy after a number of complaints were filed with the parliamentary Public Accounts Committee, the Prime Minister’s Office, Energy Ministry and varied watchdog agencies.

Kunwar said that growing obstructions could affect the project’s progress and that the government should act to stop unnecessary intervention. “If the process moves ahead smoothly, the DPR will be completed within three years; and the project will be completed seven years after that.”

The Nepal Electricity Authority had done a feasibility study of the project four years ago. More than Rs1 billion has been spent on various tasks related to the project.

“The government should develop the project with its own resources,” said Ganesh Prasad Singh, chairman of the stakeholders’ concerned committee. “We are alert with regard to the project as the ‘water mafia’ could obstruct it.” “As the project does not cost very much, the government should implement it on its own,” said Minister for Home Affairs Shakti Bahadur Basnet.

The Nalsing Gadh Hydropower Project is important as it can produce electricity round the year and will have a smaller environmental impact. “Moreover, a nominal number of locals will have to be relocated from the project site,” said Basnet.

